

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-010472**Date Inspected:** 01-Dec-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Gong Liang Zhu**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG/TOWER**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Shrikant Utekar was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

**TRIAL ASSEMBLY YARD****ULTRASONIC INSPECTION****OBG SEGMENT 1WEST**

This Quality Assurance (QA) Inspector performed conventional UT (Ultrasonic Testing) in conjunction with ABF Ultrasonic Testing (UT) department for detection of planar transverse indication.

Ultrasonic Testing (UT) performed on repair areas of the corner weld between deck panel and side panel of OBG segment 1West (CA106-001, 004, 006, CA096-002, 004, 006) utilizing scanning pattern A, B, C and D (Fig 6.7). American Bridge Fluor (ABF) request number was 11302009-2.

**OBG SEGMENT 1EAST**

This Quality Assurance (QA) Inspector performed conventional UT (Ultrasonic Testing) in conjunction with ABF Ultrasonic Testing (UT) department for detection of planar transverse indication.

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Ultrasonic Testing (UT) performed on repair areas of the corner weld between deck panel and side panel of OBG segment 1East (CA107-001, 004, 006, CA097-002, 004, 006) utilizing scanning pattern A, B, C and D (Fig 6.7). American Bridge Fluor (ABF) request number was 11302009-2.

### OBG SEGMENT 4WEST

This Quality Assurance (QA) Inspector performed conventional UT (Ultrasonic Testing) in conjunction with ABF Ultrasonic Testing (UT) department for detection of planar transverse indication.

Ultrasonic Testing (UT) performed on repair areas of the side panel (counter weight side) splice weld between OBG segment 4AW and 4BW (OBW4A-001, 002) utilizing scanning pattern A, B, C and D (Fig 6.7). During the ultrasonic inspection this Quality Assurance (QA) Inspector found 1 longitudinal linear indication that had not identified by ABF. American Bridge Fluor (ABF) request number was 12012009-1.

See Caltrans Ultrasonic Transverse Indication Evaluation sheet dated 12/01/2009 for further information on inspections.

### BAY #10

This QA Inspector randomly observed the following work in progress.

### SOUTH TOWER LIFT #4

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 052075 performing Flux Cored Arc Welding process for the weld SSTL4-1I/L-23 located on PCMK South tower lift 4. ZPMC QC Mr. Tu Jun monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-4333-TC-P4-F.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 054069 performing Flux Cored Arc Welding process for the weld SSTL4-1G/L-93 located on PCMK South tower lift 4. ZPMC QC Mr. Tu Jun monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-4333-TC-P4-F.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 053116 performing Flux Cored Arc Welding process for the weld SSTL4-1H/L-23 located on PCMK South tower lift 4. ZPMC QC Mr. Tu Jun monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-4333-TC-P4-F.

Unless otherwise noted, all work observed on this dated appeared to generally comply with applicable contract documents.

### Summary of Conversations:

No relevant conversations.

### Comments

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This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang +(86) 150.0042.2372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Utekar,Shrikant	Quality Assurance Inspector
<b>Reviewed By:</b>	Dawson,Paul	QA Reviewer

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